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09/782,539	02/13/2001	Daniele Brotto	TN-1379A	3388

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EXAMINER
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TIBBITS, PIA FLORENCE

ART UNIT	PAPER NUMBER
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2838

DATE MAILED: 02/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/782,539**

Applicant(s)  
**Brotto et al.**

Examiner  
**Pia Tibbits**

Art Unit  
**2838**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on Jan 3, 2002

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) 25-32 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 25-32 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some\* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

20) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

This Office action is in answer to the appeal brief filed January 3, 2002.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

Claim 28 recites that "the stored information is downloadable into a computer".

Claim 29 recites a reader specifically. The reader is further described as conducting "a hand-shaking routine...**to induce...transmitting** the information stored in memory" to the computer the specification on page 8 describes that "the information from memory...may be downloaded by connecting the tool...to a reader...and/or a computer". Thus it is not clear what the criticality of including a reader is, since it is described as a transmitter of information, and not an analyzer.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bauer [4636961]**.

Bauer discloses a control circuit for a power tool which includes a data input device for entering information concerning the kind of material to be treated and other information relevant to the operation of the tool. The selected binary coded address word is applied to addressing inputs of a read only memory storing control words for a controlling device for a motor of the tool. Part of the bits of a control word outputted from the ROM are applied to a display device which displays the desired or actual rotary speeds of the tool and/or other data selected by the input device. The input device generates binary output signals which are employed as addresses for the storage device which is preferably in the form of a ROM or PROM and the other part of the output signals from the storage device which are fed to the control device of the motor of the tool, corresponds to the selected input data. As a result, the optimum rotary speed of the electric motor of the tool is adjusted. At the same time, the first mentioned part of the output signal from the storage device serves for displaying the selected material, rotary speed and the like. Bauer specifically disclosed that the correlation of rotary speed value and of the control signal for the limiting of the rotary speed is programmed in the ROM or a programmable read only memory (PROM), and that PROM has the advantage that it can be programmed by the user and easily reprogrammed.

Official Notice is taken with regard to claim 28, the limitation regarding the stored information is downloadable into a computer since it is well known in the art to use a computer to optimize a process by using information stored in memory for feedback.

5. Claims 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wagner et al.**[hereinafter Wagner] **[5903462]**.

Wagner discloses a computer-implemented method and apparatus for controlling a hand-held tool, and monitoring the operating parameters of the tool. The control is embodied in **intool software**

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embedded on a **processor** within the tool which also **communicates with remote software**, i.e., a **computer**.

An operator can run the tool, or through the interaction of both software, operate the tool from a remote location, analyze data from a **performance history recorded** by the tool, and select **various parameters**. There are disclosed two types of performance records: one which will contain **torque, angle and time** information on fasteners as they were tightened or loosened; another type of performance record will describe events that occurred to the hand held tool such as **when the tool powered up**, or when a **temperature** fault occurred.

Repeatedly, the processor obtains an indication of the integrity of the computer code stored in the read only memory of the microcontroller and data stored in the nonvolatile, writable memory by performing a checksum on the memory. If a checksum test fails, the processor puts the tool into a self test fail state, which may only be exited upon cycling power to the tool. Otherwise, the processor returns the tool to an idling state. Unused memory is reset with single-byte opcodes. The main loop consists of three steps. In fig.4 a watchdog timer is enabled the first time it is written to and subsequent writes clear its counter 416. The watchdog's counter must be cleared within a particular period of time, 8.192 milliseconds in this embodiment, of its last clearing or the microcontroller will reset. The next step is to process any received command bytes 418. After the processing, a checksum is performed on the microcontroller's ROM and the **EEPROMs** to verify the integrity of the program code 420. Wagner also discloses that torque transducers, responsive to the force being applied to the fastener interface mechanism, and **temperature** transducers are located within the housing to monitor among others the motor temperature and the temperature of the power supply which may be a battery. The output of the torque and temperature transducers will be represented as digital values to the processor.

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With regard to claim 29, downloading the stored information into a reader apparatus, absent any criticality, is only considered to be the use of an "optimum" or "preferred" design that a person having ordinary skill in the art at the time the invention was made using routine experimentation would have found obvious to provide for the sensor, since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known design on the basis of its suitability for the intended use of the invention. *See In re Leshin*, 125 USPQ 416. Under some circumstances, however, changes such as these may impart patentability to a process if the particular changes claimed produce a new and unexpected result which is different in kind and not merely in degree from the results of the Prior Art. *In re Dreyfus*, 22 CCPA (Patents) 830, 73 F. 2d 931, 24 USPQ 52; *In re Waite et al.*, 35 CCPA (Patents) 1117, 168 F. 2d 104, 77 USPQ 586. Such changes are termed "critical" changes, and the applicant has the burden of proving such criticality. *In re Swenson et al.*, 30 CCPA (Patents) 809, 132 F. 2d 1020, 56 USPQ 372; *In re Scherl*, 33 CCPA (Patents) 1193, 156 F.2d 72, 70 USPQ 204. However, even though applicant's modification results in great improvement and utility over the Prior Art, it may still not be patentable if the modification was within the capabilities of one skilled in the art. *In re Sola*, 22 CCPA (Patents) 1313, 77 F. 2d 627, 25 USPQ 433; *In re Norman et al.*, 32 CCPA (Patents) 1248, 150 F. 2d 627, 66 USPQ 308; *In re Irmscher*, 32 CCPA (Patents) 1259, 150 F. 2d 705, 66 USPQ 314. More particularly, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable design by routine experimentation. *In re Swain et al.*, 33 CCPA (Patents) 125, 156 F. 2d 239, 79 USPQ 412; *Minnesota Mining and Mfg. Co. v. Coe*, 69 App. D.C. 217, 99 F. 2d 986, 38 USPQ 213; *Allen et al. v. Coe*, 77 App. D.C. 324, 135 F. 2d 11, 57 USPQ 136.

With regard to claim 30: the stored information comprising length of use type data, absent any criticality, is considered to be nothing more than a choice of engineering skill, because neither non-obvious nor unexpected results, i.e., results which are different in kind and not in

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degree from the results of the prior art, will be obtained as long as an operator will be able to optimize the parameters of the tool. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to include the length of use type data to the data that an operator can program, and store the instructions for a tool, as disclosed by Wagner, in order to be able to carry out more tasks tracked by the computer, and improve proactive maintenance.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

***Response to Arguments***

7. In view of the appeal brief filed on January 3, 2002 PROSECUTION IS HEREBY REOPENED. New grounds of rejection set forth above. To avoid abandonment of the application, appellant must exercise one of the following two options:

- (a) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (b) request reinstatement of the appeal.

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If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

8. Applicant's arguments filed on January 3, 2002 have been fully considered but they are not persuasive, in view of the above-described rejections.

a) In response to Applicant's argument stated on page 12, that "claim 29 calls for the stored information to be downloadable into a **reader apparatus**. This allows a person to obtain this information at a later time and to **analyze** it": since the applicant's reader is described in the specification on page 8 as conducting "**a hand-shaking routine...to induce...transmitting the information stored in memory**" to the computer so that "the information from memory...may be downloaded by connecting the tool...to a reader...and/or a computer", it is not clear how the operation of the tool is improved by using a reader, in lieu of a computer. It is not disclosed that the reader **analyzes** the information.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus: **Mallett [5189350]** discloses using a **counter device** which is switched on each time the motor is energized to determine the **duration of the operation**, i.e. the total **length of time** for which a motor is operated.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is (703) 308-7305. If unavailable, contact the Supervisory Patent Examiner Peter Wong whose telephone number is (703) 305-3477.



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11. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

Papers related to Technology Center 2800 applications **only** may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

PFT

February 7, 2002

  
Adolf Deneke Berhane  
Primary Examiner